

# WATER TEMPERATURE

### Installation Instructions

Part No: SG71220 2 inch-52mm

#### v20190409

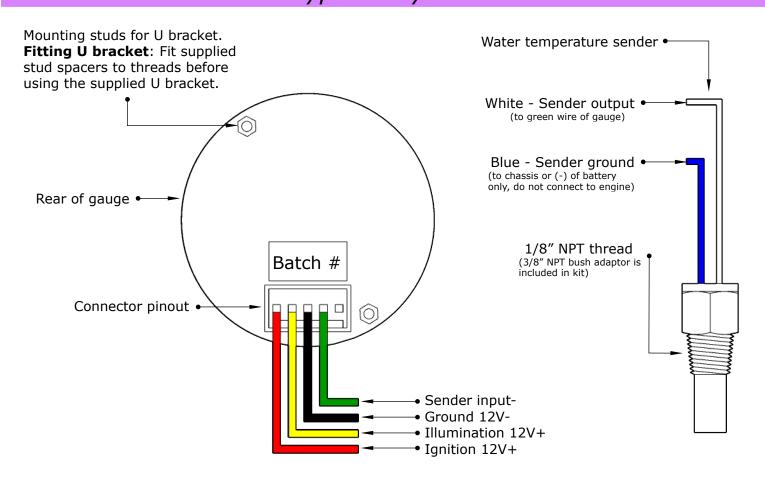
#### Important notes before installing:

- Installing this product to your vehicle may require an adaptor. SAAS make a large range of adaptors and installation parts, please check with your SAAS dealer for available adaptors.
- SAAS Autoline series gauges are designed for 12volt systems ONLY!
- All installation work should be done by a qualified professional to avoid damage to this product.
- SAAS **RECOMMENDS** all products be tested prior to installation. This will save time and speed up the troubleshooting process if you encounter any issues.

## Wiring Guide:

Wire colour	Wire Function	Wire Connection Location	
Red	Ignition 12V+	Ignition harness / Fuse box	
Yellow	Illumination 12V+ ( <b>NOT</b> adjustable)	Park light circuit (do <b>NOT</b> connect to a dimmer)	
Black	Ground 12V-	Vehicle body	
Green	Sender input-	Sender output (white wire of sender)	
Green	Serider input	Schaer output (write wire or schaer)	

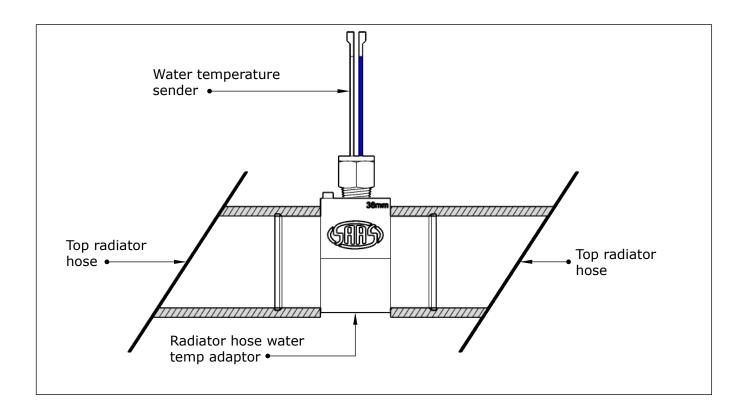
# Wiring Diagram Typical Layout



## Water Temp Sender Installation:

#### - Recommended sender locations:

- Water temp senders should be installed in a radiator, water temp adaptor or cylinder head.
- The most common way of fitting a water temp sender is by using a radiator hose adaptor, the adaptor is fitted to the vehicles **TOP** radiator hose. The diagram below shows how a water temp sender and radiator hose adaptor is fitted.



## **Troubleshooting:**

**Please note:** If you are having problems with the installation of this product, please do not contact your retailer or SAAS until you have read **ALL** the troubleshooting notes below.

Problem	Possible Cause	Solution	
-gauge not reading	-bad connection	-test for power at the back of the gauge	
-needle jumps around		-test for ground at the sender	
	-sender signal wire is too long or too thick	-wire thickness must not exceed 20AWG	
	-damaged sender	-test sender using a multimeter, a good	
	_	sender should read:50KΩ@room temp 21°C	
-s		-see page 3 for scale	
-no back lighting	-incorrect wiring	-refer to fitting instructions	
	-connected to a dimmer	-refer to fitting instructions	

#### Additional Troubleshooting Notes/Tips:

#### - How to test a Autoline water gauge:

Disconnect water sender from gauge, power up gauge, connect green wire of gauge to ground, if needle goes to 120°C (MAX) then gauge is ok, if needle does not move from 40°C check wiring to gauge.

#### - How to test a Autoline water sender:

Disconnect the wiring from the water temp sender and connect the white and blue sender wires to a multimeter, this test must be performed at room temp (21°C).

A good water temp sender should read around 50K  $\Omega$  @ room temp and will decrease when heat is applied. (See below for scale)

# **GAUGE INFORMATION**

# **Specifications**

Operating range	40°C > 120°C		
Operating voltage	8v > 18v		
Water temp sender ohms range	$60$ K $\Omega$ > 0.9K $\Omega$ , scale: 50K $\Omega$ @ 21°C or 6.14K $\Omega$ @ 80°C		
Water temp sender thread size	1/8" NPT		
Water temp sender dimensions	total length 35mm		
Water temp sender wire length	100mm		
Gauge lighting type	LED (NON DIMMABLE)		
Gauge lighting colour	white		
Mounting depth required for gauge	65mm (minimum)		
Total depth of gauge	70mm (including bezel)		
Mounting hole size	52mm		

#### Contents:

In The Box	Qty	Notes	Part No.
Water temperature gauge			
Water temperature sender			SG21001
Wiring connector	1		SG2120
Mounting U bracket			SG21005
Mounting U bracket studs (M4x0.7 thread)			
Mounting U bracket nuts	2		
Fitting instructions	1		

For further assistance email: tech@saasautomotive.com.au

#### Warranty Terms & Conditions:

SAAS Automotive Pty Ltd warrants this product against defects in factory workmanship and materials for a period of twelve (12) months from the date of original purchase. This warranty applies to the first retail purchaser, is non-transferable and covers only where the product has been subjected to normal use or service. Provision of this warranty shall not apply to any SAAS Automotive product that has been used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. Warranty claims to the manufacturer must be transportation prepaid and accompanied with dated proof of purchase. On any part or product found to be defective after examination by SAAS Automotive Pty Ltd, SAAS Automotive Pty Ltd will only repair or replace the merchandise through the original selling dealer or on a direct basis. SAAS Automotive Pty Ltd assumes no responsibility for diagnosis, removal and/or installation labour, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of suitability, and any other obligation on the part of SAAS Automotive Pty Ltd, or the selling dealer.

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